

CLAIMS

1. A variable nozzle (10) for a gas turbine fixed to a shaft (11), said variable nozzle (10) comprising a pressurized upper surface (12) and a depressurized lower surface (14) opposite to the upper surface (12), characterized in that said variable nozzle comprises a series of substantially "C"-shaped sections, each having a first rounded end (20) and a second rounded end (21), each section of the series of sections also having the concavity 5 facing upwards with respect to a base (90) and arranged one after another continuously, in the direction of an axis of the shaft (11) along a curved line (60), characterized in that said at least second degree curved line (60) lies on a surface (70) having an axis orthogonal to 10 the axis of the shaft (11) and also tilted with respect to the base (90) by an angle (80).

2. The variable nozzle (10) according to claim 1, characterized in that said curved line (60) is a parabolic line.

20 3. The variable nozzle (10) according to claim 1, characterized in that said curved line (60) is a hyperbolic line.

4. The variable nozzle (10) according to claim 1, characterized in that said curved line (60) is a combination 25 of a parabolic line and a hyperbolic line.

5. The variable nozzle (10) according to claim 1, characterized in that said curved line (60) is a third degree line.

6. The variable nozzle (10) according to any of the  
5 previous claims, characterized in that said curved line (60) has a maximum or minimum point.

7. The variable nozzle (10) according to any of the previous claims, characterized in that the upper surface (12) is saddle-shaped.

10 8. A variable nozzle for a gas turbine as previously described and illustrated above and for the purposes specified above.

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